Purpose of the Report

The ISA Interactive Tracking Report allows a school to monitor the performance over time of individual students and of different groups of students within a school. Data from all schools participating in the ISA programme have been used to establish reliable benchmarks for student performance. With this report it is possible to monitor, over a number of calendar years, whether student performance has changed in relation these benchmarks.

All students have their performance in each domain measured against a single scale. The ISA scale scores for a student are different from the “raw” scores that the student would get by adding up the number of correctly answered questions on a test. The ISA scale makes it possible to make meaningful comparisons of results between different grade levels and between different calendar years even though the tests administered are not the same.

With this report the performance of an individual student in Maths, Reading and Writing can be compared to the performance of other students in your school and in all ISA schools. The report can be adjusted to take into account the characteristics of gender and English speaking background. Different cohorts of students can be measured against benchmarks from all ISA schools and from ISA schools with similar levels of non-English speaking students.

The performances of students who have participated in the ISA programme for at least two test administrations (known as ‘matched’ students) can be tracked. Easy comparison can be made between the matched cohort of students and the full cohort. This feature allows schools to see the impact of student turnover on cohort performance.

(Note on matching: full name and date of birth are used to identify individual students within a school. The matching process does not apply where a student changes his/her name between test administrations or moves from one school to another.)

This report is recommended for schools that have participated in ISA programmes for at least three administrations.

This report does not provide detailed information or analysis of student performance on individual test items. For detailed information relating to a single test administration, please refer to the ISA standard reports and the ISA Interactive Diagnostic Report.
How to use this Report

The report is provided in the form of an interactive spreadsheet. By clicking on the tabs at the bottom of the spreadsheet it is possible to view the nine different displays available. The second tab gives a summary of the different displays. This summary is replicated here:

Glossary
Lists abbreviations and explains some terms and statistical concepts used in this report.

Overall
Displays performance by grade of all students in a given calendar year.

Snapshot
Highlights strong or weak performance by grade level of all students in a given calendar year against the ISA norm.

Cohort
Displays performances of different cohorts of students between different calendar years.
In any calendar year, the cohort performance can be compared to all other ISA schools and to ISA schools with the similar percentage of English speaking background students (known as ‘Like’ schools). The cohort can also be compared to the ‘matched’ students – students from your school who have taken the ISA tests at your school in previous years.

Gender
Displays performances of male, female and all students over different calendar years.

ESB
Displays performances of those students from English speaking and non-English speaking backgrounds over different calendar years.

Cohort Growth
Follows the performance of a cohort of students over different calendar years in relation to ISA norms. Displays the cohort performance against the following ISA percentiles for each grade: 5th, 25th, 50th, 75th, 95th. Indicates whether cohort performance is significantly different from the ISA norm.

Matched List
Lists students who have taken ISA tests in previous years.

Individual Growth
Displays performance of an individual student. The individual student’s performance can be compared to the performance of all students in his/her school and to the performance of all students in all ISA schools. A ‘matched’ student’s performance can be viewed over different calendar years.

Characteristics
Displays background characteristics of students, i.e. gender and language speaking characteristics.

The remaining pages of this manual provide detailed descriptions of how to interpret the information presented in each of the tabs.
OVERALL
Displays performance by grade of all students in a given calendar year.

This shows your school's overall performance by comparing the results for each grade. The calendar year, subgroup and domain can be altered by clicking on the drop-down menus.

In this example, the calendar year is 2011, the subgroup is all students in that particular grade, and the domain is reading. The table shows the mean (M) and standard deviation (SD) of the scale scores. It also shows the number of students (N) that participated in the ISA testing programme at each grade level.

The graphs in this example show that the scale scores for each grade become progressively higher as the grade level increases (as one would expect). It also shows that there is very little difference in average reading ability between students in Grade 9 and Grade 10.

This display does NOT show how a cohort of students has improved over time.
For a display which shows how a cohort has improved over time, see ‘Cohort Growth’.
This shows your school’s strength or weakness by comparing the results across grade levels over the four ISA domains. The calendar year and subgroup can be altered by clicking on the drop-down menus.

In this example, the calendar year is 2011, and the subgroup is all students. The table shows the averaged z-scores of this school at each grade level for each domain.

The graphs in this example show that in Mathematics, the average Grade 3 students in this school were performing below the average student in the ISA norm, the average Grade 4 to 6 students in this school were performing at a similar level to that of the average student in the ISA norm, and the average Grade 7 to 10 students in this school were performing above the average student in the ISA norm.

The graphs in this example also show that in Writing B (Expository), the average Grade 3 to 5 students in this school were performing below the average student in the ISA norm, although in Reading they were performing at or above the average student in the ISA norm.

The progress of your school’s performance can be observed by comparing the snapshot performance across calendar years.
This shows how the performance of a cohort of students has changed between different calendar years.

In this example, the selected calendar year is 2011, the cohort is Grade 6 students and the domain is mathematics. The information from 2011 is displayed at the right hand side.

This information is being compared to data from last year (as shown by the radio button in the white box) when the same cohort of students was in Grade 5 (in 2010). The 2010 data appears on the left hand side. Clicking on the radio button ‘2 years ago’ allows comparison between data from two years earlier when the same cohort of students was in Grade 4 (in 2009). Clicking on the radio button ‘3 years ago’ allows comparison between data from three years earlier when the same cohort of students was in Grade 3 (in 2008).

The graphs in this example show that in 2010 the Grade 5 students in this school were performing at a similar level to that of ‘All Other Schools’ and ‘Like Schools’. The graphs for 2010 indicate that one year later (Grade 6 in 2011) the students were performing at a level slightly above ‘All Other Schools’ and Like Schools. The graphs also indicate that the ‘matched’ students (those students who participated in both rounds of testing) have improved substantially.
This shows the difference in scale scores between male and female students for a particular grade.

In this example, the selected calendar year is 2011, the cohort is Grade 6 students and the domain is mathematics. The information from 2010 is displayed at the right hand side.

This information is being compared to data from last year (as shown by the radio button in the white box) when the same cohort of students was in Grade 5 (in 2010). The 2010 data appears on the left hand side. Clicking on the radio button ‘2 years ago’ allows comparison between data from two years earlier when the same cohort of students was in Grade 4 (in 2009). Clicking on the radio button ‘3 years ago’ allows comparison between data from three years earlier when the same cohort of students was in Grade 3 (in 2008).

The graphs in this example show that in both calendar years the performance of average male students was slightly better than that of female students.
This shows the difference in scale scores between students from an English speaking background and students from a non-English speaking background.

In this example, the selected calendar year is 2011, the cohort is Grade 6 students and the domain is maths. The information from 2010 is displayed at the right hand side. This information is being compared to data from last year (as shown by the radio button in the white box) when the same cohort of students was in Grade 5 (in 2010). The 2010 data appears on the left hand side. Clicking on the radio button '2 years ago' allows comparison between data from two years earlier when the same cohort of students was in Grade 4 (in 2009). Clicking on the radio button '3 years ago' allows comparison between data from three years earlier when the same cohort of students was in Grade 3 (in 2008).

The graphs in this example show that in 2010 the performance of average students from a non-English speaking background was slightly better than that of students from an English speaking background. In 2011 these results had been reversed. The number of students participating and the standard deviations of the distributions, however, should be taken into account when attempting to draw conclusions about this data.
This shows how the performance of a cohort of students has changed over time in respect to ISA benchmarks.

In this example, the cohort is the group of students in Grade 10 in 2011. The reading scale scores for this cohort are displayed over six consecutive years (from 2006 when the same cohort of students was in Grade 5).

The graphs in this example show that in 2006 the performance of the average Grade 5 student was between the 25th and 50th percentile. In 2011, the performance of the average student in the same cohort was close to the 75th percentile.

The number of matched students, however, should be taken into account when attempting to draw conclusions about this data. On first reading it may appear that student performance has improved dramatically (for example, because of teaching strategies or curriculum changes, etc.), but since international schools have a very high turnover of students this data may in fact be based on results from completely different students who just happen to be more gifted.
This gives the names and scale scores of students who have taken ISA tests over at least two testing cycles.

In this example, the selected calendar year is 2011, the cohort is Grade 7 students and the domain is reading. The scale scores for this year are shown in the right hand column.

This information is being compared to data from the 2 years ago (as shown by the radio button in the white box) when the same cohort of students was in Grade 5 (in 2009). The scale scores from 2009 are shown in the adjoining column.

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INDIVIDUAL GROWTH
Displays performance of an individual student. The individual student’s performance can be compared to the performance of all students in his/her school and to the performance of all students in all ISA schools. A ‘matched’ student’s performance can be viewed over different calendar years.

This shows how the performance of an individual student has changed over time in respect to both cohort performance and ISA benchmarks. The student is represented by the small red circle. The box plot represents the performance of the cohort in that school. The dotted lines represent ISA benchmarks. Clicking on the button ‘Hide School Performance’ removes the box plot and clicking on the button ‘Hide Individual Trendline’ removes the orange line showing the trend over time for that student.

In this example, the student is being compared against other Grade 7 students in 2011 in the domain of mathematics. The graphs in this example show that in 2008 (when the student was in Grade 4) the student’s performance was around the 50th percentile in the school and for the whole ISA Grade 4 population. The student’s performance increased steadily over the next two years. In 2011 (when the student was in Grade 7) the student performed above the 75th percentile in the school and for the whole ISA Grade 6 population. The performance of the whole school improved and the performance of the student within the school improved markedly.
This shows the background characteristics of students within a cohort over a number of calendar years.

In this example, the cohort is all students in Grade 8 in the domain of mathematics. The graph on the left displays gender characteristics. The graph on the right displays language background characteristics.

The graphs in this example show that in 2006 less than 40 per cent of Grade 8 students were female but in 2008 more than 50 per cent of Grade 8 students were female.

This data may be useful when making judgements about other reports.
NOTE ON TRACKING

Students are ‘matched’ in the Tracking Report based on consistency of full name and date of birth between test administrations. This data is sourced from biodata spreadsheets returned by schools each year. Name, date of birth and gender are used to match individual students within a school from one test administration to the next. Where provided by schools, the ‘School Student ID’ field provides additional verification that the same student sat the ISA, for example, in October 2010 and October 2012. Matching does not occur when a student has a different name between test administrations or moves from one school to another. For example, the following students would not have their results tracked over time as they are not ‘matched’ records for tracking purposes:

Oct 2010 – SMITH, Bettina → Oct 2012 – SMITH, Betina
Feb 2011 – PARK, Kim → Feb 2012 – KIM, Park

Schools are offered the opportunity to correct the information in our historical records prior to production of the Tracking Report to ensure that student details are correctly recorded and consistent between test administrations. This results in accurate tracking of cohorts and individual students. An Excel spreadsheet containing details for all students from all test administrations is emailed to schools with ‘matches’ for tracking identified. Instructions for correcting ‘non-matched’ student entries is provided.

If schools do not wish to pursue this higher level of matching, the Tracking Report is produced using the existing data in our records (auto matches based on consistency of name and date of birth between testing administrations at a given school).

PURCHASING THE ISA INTERACTIVE TRACKING REPORT

The ISA Interactive Tracking Report is a Microsoft Excel document, delivered online via your school’s ISA Online Results secure web page.

The cost of the ISA Interactive Tracking Report is AUD800.00 if ordered prior to the release of standard ISA reports. An additional late fee of AUD200.00 applies where schools order after the release of standard reports.

To request a demo version or to order the ISA Interactive Tracking Report, please email your request to isa@acer.edu.au